



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/802,411

03/09/2001

Dominik J. Schmidt

5439

21906

7590

11/29/2005

TROP PRUNER & HU, PC
8554 KATY FREEWAY
SUITE 100
HOUSTON, TX 77024

EXAMINER

PHU, SANH D

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/802,411	SCHMIDT, DOMINIK J.	
	Examiner	Art Unit	
	Sanh D. Phu	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-12,16-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-12,16-27,29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Applicant's Response filed on 10/20/05. Claims 1, 2, 7-12, 16-27 and 29 are currently pending in this application. Claims 3-6, 13-15 and 28 have been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7-12, 16-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz et al (2002/0059434), previously cited, in view of Wong (6,441,442), previously cited.

-Regarding claims 1 and 11, see figures 2-4, and sections [0012], [0038] to [0049], Karaoguz et al discloses a system (see figure 3), which comprises:

a processor (66);

a multimode wireless device comprising:

an analog portion including:

a first radio core (68) which can be configured as a cellular radio core (see [0012]);

a radio sniffer (72, 68) for detecting and passing cellular radio signals being receiving by antenna (68);

a second radio core (70) which can be configured as a short-range wireless transceiver core (see [0012]);

a digital portion including:

a processor core (60, 62, 64) handling a plurality of wireless communication protocols;

a program storage device (80, 82, 84) (see figure 4);

an input recognizer (82), embodied in said program storage device, to receive an input from a user; and

a computer readable code embodied in said program storage device for receiving the user input from said input recognizer (see [0042], [0047], [0048]).

Karaoguz et al does not disclose whether said analog portion and said digital portion are integrated on the same substrate.

Wong teaches that radio frequency devices and digital devices can be all on the same substrate using CMOS fabrication process (see ABSTRACT).

Therefore, for an application, it would have been obvious for a person skilled in the art, when building Karaoguz et al invention, to integrate said analog portion and said digital portion on the same substrate, as taught by Wong, so that the fabrication/manufacture cost of the system would be reduced (see Wong, col. 1, lines 47).

Karaoguz et al in view of Wong further teaches that the analog portion and the digital portion can be configured to integrated in an integrated circuit (see Karaoguz et al, [0071]).

Karaoguz et al in view of Wong further teaches that the system can be configured to comprise a plurality of memories coupled to the processor core (see Karaoguz et al, (84) of figure and (144) of figure 6).

Further regarding to claim 1, Karaoguz et al in view of Wong further teaches that the processor core can be configured to have a first plurality of processors (60, 62) (see Karaoguz et al, figure 3) and a plurality of second processors (130, 142) (see Karaoguz et al, figure 6).

–Regarding claims 2 and 12, Karaoguz et al in view of Wong teaches that the system can conform with a Bluetooth protocol (see Karaoguz et al, [0012]).

–Regarding claims 7, 16 and 17, Karaoguz et al in view of Wong teaches that said processor core can be configured to plurals of processors (see Karaoguz et al, (60, 62) of figure 3 and (130, 142) of figure 6).

–Regarding claims 8–10 and 18–20, Karaoguz et al in view of Wong teaches a router (64) coupled to the processor core, the cellular radio core, and the short–range transceiver core wherein the router comprises an engine that tracks destinations of information packets and sends them in parallel through a plurality of separate path ways on plural of channels (60, 62) (see Karaoguz et al, figure 3).

–Regarding claim 21, as similarly applied to claims 1 and 11, Karaoguz et al disclose a method wherein the method comprises:

step (68, 64, 60) of communicating data via a cellular radio medium using a multi–mode wireless integrated circuit (see figure 3) including; a cellular radio core (68), a short–range wireless transceiver core (70), and a processor core (64, 60, 62); and

step (70, 62, 64) of communicating data via a short-range wireless medium using the multi-mode wireless device integrated circuit.

Karaoguz et al does not disclose that the cellular radio core, the short-range wireless transceiver core, and the processor core are included in a substrate.

Wong teaches that radio frequency devices and digital devices can be all on the same substrate using CMOS fabrication process (see ABSTRACT).

Therefore, for an application, it would have been obvious for a person skilled in the art, when building Karaoguz et al invention, to integrate the cellular radio core, the short-range wireless transceiver core, and the processor core on the same substrate, as taught by Wong, so that the fabrication/manufacture cost of the system would be reduced (see Wong, col. 1, lines 47).

—Regarding claim 23, Karaoguz et al in view of Wong further teaches that the method can be configured for primarily communicating the data via one of the cellular radio core and the short-range wireless transceiver core as a primary communication channel (see Karaoguz et al, [0048]), and the method

can be configured for periodically communicating the data ($f(k)$, $f(k+1)$) via the other of the cellular radio core and the short-range wireless transceiver core a secondary communication channel during an inquiry scan procedure (see Karaoguz et al, figure 7, and [0064, 0065]).

–Regarding claim 24, Karaoguz et al in view of Wong teaches that the method can be configured for communicating data via the short-range wireless medium while in a local area network and communicating data via the cellular radio medium while outside the local area network (see Karaoguz et al, figure 1 and [0034–0037]).

–Regarding claim 25, Karaoguz et al in view of Wong teaches that the method can be configured for powering down the short-range wireless transceiver core while communicating data via the cellular radio medium (see Karaoguz et al, [0063]).

–Regarding claim 26, Karaoguz et al in view of Wong teaches that the method can be configured for searching for a short-range wireless medium signal (A) during a time interval of the cellular radio core (see Karaoguz et al, figures 1 and 7, and [0048, 0064, 0065]).

-Regarding claim 27, Karaoguz et al in view of Wong teaches does not teach transmitting a deregistration message to a cellular system if the short-range wireless medium signal is found. However, Karaoguz et al teaches that the multi-mode wireless integrated circuit can be configured to communicate with a cellular system during the multi-mode wireless integrated circuit being within a communication range (20) of the cellular system (26) (see figure 1) and during the cellular system being selected by the processor core (64, 60, 62) for communication (see figure 3), and can be configured to search and detect for the short-range wireless medium signal of a short-range wireless network (28) (see figure 1) when the multi-mode wireless integrated circuit is within the communication range (22) of the short-range wireless network (see also figure 7). In the case that the multi-mode wireless integrated circuit is located in an area which is common to both the communication ranges (20) and (22) (see figure 1) and that the cellular system are concurrently being selected by the processor core (64, 60, 62) for communication, it would have been obvious for a person skilled in the art to implement the multi-mode wireless integrated circuit to be able to transmit any data or message to the

Art Unit: 2682

cellular system if the short-range wireless medium signal is found as long as the cellular system are still concurrently selected by the processor core (64, 60, 62) for communication since the multi-mode wireless integrated circuit is capable to do so.

-Regarding claims 22 and 29, Karaoguz et al in view of Wong teaches that the method can be configured for communicating data packets in parallel through the cellular radio medium and the short-range wireless medium during a dual mode (see Karaoguz et al, [0063]).

Response to Arguments

4. Applicant's arguments filed on 10/20/05 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D. Phu whose telephone number is (571) 272-7857. The examiner can normally be reached on 8:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quochien Vuong can be reached on (571) 272-7902.

Art Unit: 2682

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sanh D. Phu
Examiner
Art Unit 2682

SP

 11/17/05

QUOCHIEN B. VUONG
PRIMARY EXAMINER